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KRAS Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP16356B

Product Information

Application	WB, IF, FC, E
Primary Accession	P01116
Other Accession	P08644, P32883, NP_203524.1, NP_004976.2
Reactivity	Human, Mouse, Rat
Predicted	Rat, Bovine, Canine, Rabbit, Chicken
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB32708
Calculated MW	21656
Antigen Region	146-174

Additional Information

Gene ID	3845
Other Names	GTPase KRas, K-Ras 2, Ki-Ras, c-K-ras, c-Ki-ras, GTPase KRas, N-terminally processed, KRAS, KRAS2, RASK2
Target/Specificity	This KRAS antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 146-174 amino acids from the C-terminal region of human KRAS.
Dilution	WB~~1:1000 IF~~1:10~50 FC~~1:10~50 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.05% (V/V) Proclin 300. This antibody is purified through a protein A column, followed by peptide affinity purification.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	KRAS Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	KRAS
Synonyms	KRAS2, RASK2

Function	Signal transducer in the Ras-MAPK signaling pathway that regulates cell proliferation and survival (PubMed:22711838, PubMed:23698361). Ras proteins bind GDP/GTP and possess intrinsic GTPase activity (PubMed:20949621, PubMed:39809765). Activates MAPK1/MAPK3 resulting in phosphorylation and ultimately degradation of GJA1 (By similarity). Plays a role in promoting oncogenic events by inducing transcriptional silencing of tumor suppressor genes (TSGs) in colorectal cancer (CRC) cells in a ZNF304-dependent manner (PubMed:24623306). Recognized by LZTR1 that mediates its ubiquitination by a BCR (BTB-CUL3-RBX1) E3 ubiquitin-protein ligase complex (PubMed:40934300).
Cellular Location	Cell membrane; Lipid-anchor; Cytoplasmic side. Endomembrane system. Cytoplasm
Tissue Location	Expressed throughout the epidermis, but weakly expressed in the stratum corneum and dermis (at protein level)

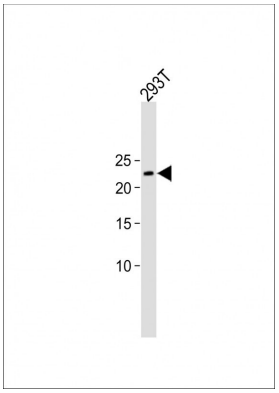
Background

This gene, a Kirsten ras oncogene homolog from the mammalian ras gene family, encodes a protein that is a member of the small GTPase superfamily. A single amino acid substitution is responsible for an activating mutation. The transforming protein that results is implicated in various malignancies, including lung adenocarcinoma, mucinous adenoma, ductal carcinoma of the pancreas and colorectal carcinoma. Alternative splicing leads to variants encoding two isoforms that differ in the C-terminal region.

References

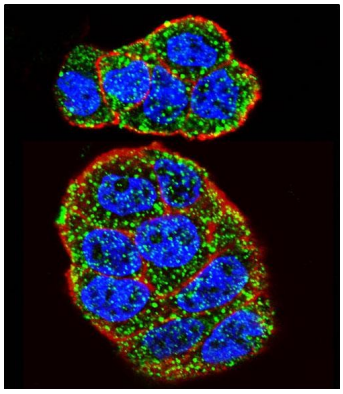
Bruckman, K.C., et al. Oral Surg Oral Med Oral Pathol Oral Radiol Endod 110(5):632-637(2010)
Wong, K.K., et al. Am. J. Pathol. 177(4):1611-1617(2010)
Irahara, N., et al. Diagn. Mol. Pathol. 19(3):157-163(2010)
Carotenuto, P., et al. Pharmacogenomics 11(8):1169-1179(2010)
Leventopoulos, G., et al. Clin. Exp. Rheumatol. 28(4):556-557(2010)

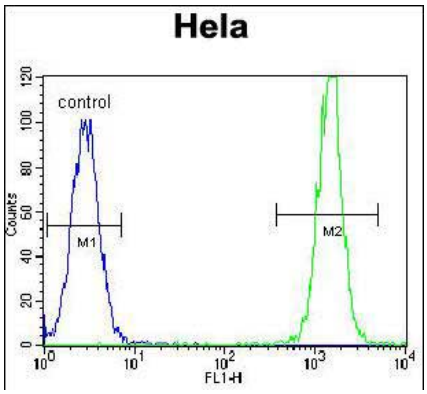
Images



All lanes: Anti-KRAS Antibody (C-term) at 1:500 dilution + 293T whole cell lysate Lysates/proteins at 20 µg per lane. Secondary: Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated (ASP1615) at 1/15000 dilution. Observed band size: 22 KDa Blocking/Dilution buffer: 5% NFDM/TBST.

Confocal immunofluorescent analysis of KRAS Antibody (C-term)(Cat#AP16356b) with WiDr cell followed by Alexa Fluor 488-conjugated goat anti-rabbit lgG (green).Actin filaments have been labeled with Alexa Fluor 555 phalloidin (red).DAPI was used to stain the cell nuclear (blue).





KRAS Antibody (C-term) (Cat. #AP16356b) flow cytometric analysis of Hela cells (right histogram) compared to a negative control cell (left histogram).FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.